

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

Claim 1 (canceled).

2. (currently amended): A radiation image read-out apparatus as defined in ~~Claim 1~~ Claim 14 or 15 in which the detecting head detects the stimulated emission from the surface of the radiation image convertor panel from which the radiation impinges upon the radiation image convertor panel.

3. (currently amended): A radiation image read-out apparatus as defined in ~~Claim 1~~ Claim 14 or 15 in which the detecting head detects the stimulated emission from the surface of the radiation image convertor panel opposite to the surface from which the radiation impinges upon the radiation image convertor panel.

4. (currently amended): A radiation image read-out apparatus as defined in ~~Claim 1~~ Claim 14 or 15 further comprising an image processing means which carries out an energy subtraction processing or a superposition processing by the use of the pieces of image data obtained from the respective radiation image convertor panels.

5. (currently amended): A radiation image read-out apparatus as defined in ~~Claim 1~~ Claim 14 or 15 further comprising a moving means which moves the detecting head along each of the separated radiation image convertor panels in which the detecting head detects the stimulated emission while being moved by the moving means.

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6. (currently amended): A radiation image read-out apparatus as defined in ~~Claim 1~~
Claim 14 or 15 further comprising a reciprocating means which reciprocates back and forth the
detecting head along each of the separated radiation image convertor panels in which the
detecting head detects the stimulated emission on both the forward travel and the backward
travel by the reciprocating means.

7. (currently amended): A radiation image read-out apparatus as defined in ~~Claim 1~~
Claim 14 or 15 in which the radiation image convertor panels are different in shape.

8. (currently amended): A radiation image read-out apparatus as defined in ~~Claim 1~~
Claim 14 or 15 in which the radiation image convertor panels are provided with a locator
member which keeps the space between the detecting head and the surface of the radiation image
convertor panel facing the detecting head at a predetermined space during detection of the
stimulated emission from the radiation image convertor panel.

9. (currently amended): A radiation image read-out apparatus as defined in ~~Claim 1~~
Claim 14 or 15 in which each of the radiation image convertor panels is provided thereon with a
light emitting plate which transmits the radiation and emits erasing light which erases radiation
energy remaining in the radiation image convertor panel.

10. (currently amended): A radiation image read-out apparatus as defined in ~~Claim 1~~
Claim 14 or 15 in which the radiation image convertor panels are arranged so that a radiation
image convertor panel remoter from the object absorbs more radiation when all the radiation
image convertor panels are exposed to given radiation under the same conditions.

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11. (currently amended): A radiation image read-out apparatus as defined in ~~Claim 1~~
Claim 14 or 15 which detects the stimulated emissions from the radiation image convertor panels
so that high-frequency component of the information representing the object is more abbreviated
in a radiation image convertor panel which is positioned remoter from the object when the
radiation image convertor panels are exposed to the radiation passing through the object.

12. (currently amended): A radiation image read-out apparatus as defined in ~~Claim 1~~
Claim 14 or 15 in which the radiation image convertor panel comprises a stimuable phosphor
layer and a substrate which supports the stimuable phosphor layer, and the substrate doubles as a
radiation absorbing filter which absorbs the radiation.

13. (currently amended): A radiation image read-out apparatus as defined in ~~Claim 1~~
Claim 14 or 15 in which the radiation image convertor panel comprises a substrate and a
stimuable phosphor layer of columnar crystal stimuable phosphors formed on the substrate by
vapor building-up.

Please add the following new claims:

Claim 14. (new): A radiation image read-out apparatus comprising
a plurality of radiation image convertor panels superposed one on another in a direction
in which radiation passing through an object propagates,
a separator which separates the superposed radiation image convertor panels exposed to
the radiation passing through the object from one another by rotating about an axis on a plane
parallel to the surfaces of the radiation image convertor panels one or more of the superposed
radiation image convertor panels relatively to the others, and

a single detecting head which detects stimulated emission emitted from each of the radiation image convertor panels separated by the separator,

thereby obtaining a plurality of pieces of image data each representing a radiation image of the object recorded on each of the radiation image convertor panels by exposure to the radiation on the basis of output from the detecting head.

Claim 15. (new): A radiation image read-out apparatus comprising

a plurality of radiation image convertor panels superposed one on another in a direction in which radiation passing through an object propagates,

a separator which separates the superposed radiation image convertor panels exposed to the radiation passing through the object from one another by moving in a parallel displacement and rotating about an axis on a plane parallel to the surfaces of the radiation image convertor panels one or more of the superposed radiation image convertor panels relatively to the others, and

a single detecting head which detects stimulated emission emitted from each of the radiation image convertor panels separated by the separator,

thereby obtaining a plurality of pieces of image data each representing a radiation image of the object recorded on each of the radiation image convertor panels by exposure to the radiation on the basis of output from the detecting head.